Project Title	Funding	Strategic Plan Objective	Institution
Role of GluK6 in cerebella circuitry development	$55,826	Q2.Other	Yale University
Morphogenesis and function of the cerebral cortex	$409,613	Q2.Other	Yale University
Identification of candidate genes at the synapse in autism spectrum disorders	$169,422	Q2.Other	Yale University
Functional analysis of EFR3A mutations associated with autism	$31,250	Q2.Other	Yale University
Pleiotropic roles of dyslexia genes in neurodevelopmental language impairments	$41,800	Q2.S.D	Yale University
Allelic choice in Rett syndrome	$390,481	Q2.S.D	Winifred Masterson Burke Medical Research Institute
Genetically defined stem cell models of Rett and fragile X syndrome	$175,000	Q2.S.D	Whitehead Institute for Biomedical Research
Developing novel automated apparatus for studying battery of social behaviors in mutant mouse models for autism	$0	Q2.Other	Weizmann Institute of Science
Molecular mechanisms regulating synaptic strength	$293,266	Q2.Other	Washington University in St. Louis
The role of intracellular metabotropic glutamate receptor 5 at the synapse	$26,338	Q2.S.D	Washington University in St. Louis
Role of intracellular mGluR5 in fragile X syndrome and autism	$150,000	Q2.S.D	Washington University in St. Louis
Macrocephalic autism: Exploring and exploiting the role of PTEN	$28,000	Q2.Other	University of Wisconsin - Madison
dFMRP and Caprin: Translational regulators of synaptic plasticity	$12,768	Q2.S.D	University of Washington
Regulation of synapse elimination by FMRP	$54,734	Q2.S.D	University of Texas Southwestern Medical Center
Investigation of protocadherin-10 in MEF2- and FMRP-mediated synapse elimination	$51,326	Q2.S.D	University of Texas Southwestern Medical Center
Cortical circuit changes and mechanisms in a mouse model of fragile X syndrome	$278,656	Q2.S.D	University of Texas Southwestern Medical Center
Study of fragile X mental retardation protein in synaptic function and plasticity	$366,516	Q2.S.D	University of Texas Southwestern Medical Center
Mechanisms of mGluR5 function and dysfunction in mouse autism models	$419,137	Q2.S.D	University of Texas Southwestern Medical Center
Coordinated control of synapse development by autism-linked genes	$75,000	Q2.S.D	University of Texas Southwestern Medical Center
Mechanisms of synapse elimination by autism-linked genes	$75,000	Q2.S.D	University of Texas Southwestern Medical Center
Mouse models of human autism spectrum disorders: Gene targeting in specific brain regions	$300,000	Q2.S.D	University of Texas Southwestern Medical Center
Mouse models of the neuropathology of tuberous sclerosis complex	$253,177	Q2.S.D	University of Texas Health Science Center at Houston
Proteomics in drosophila to identify autism candidate substrates of UBE3A	$313,159	Q2.S.D	University of Tennessee Health Science Center
Proteomics in drosophila to identify autism candidate substrates of UBE3A (supplement)	$29,600	Q2.S.D	University of Tennessee Health Science Center

Project Title	Funding	Strategic Plan Objective	Institution
MET signaling in neural development and circuitry formation	$83,810	Q2.Other	University of Southern California
Function and structure adaptations in forebrain development	$541,770	Q2.Other	University of Southern California
Functional circuit disorders of sensory cortex in ASD and RTT	$254,976	Q2.S.D	University of Pennsylvania
Transcriptional responsiveness in lymphoblastoid cell lines	$52,863	Q2.Other	University of Pennsylvania
Ube3a requirements for structural plasticity of synapses	$0	Q2.Other	University of North Carolina at Chapel Hill
Genetic studies of autism-related Drosophila neurexin and neuroligin	$550,000	Q2.Other	University of North Carolina at Chapel Hill
GABAergic dysfunction in autism	$278,486	Q2.Other	University of Minnesota
Altered gastrointestinal function in the neuroligin-3 mouse model of autism	$69,813	Q2.S.E	University of Melbourne
Altered gastrointestinal function in the neuroligin-3 mouse model of autism	$50,434	Q2.S.E	University of Melbourne
Altered gastrointestinal function in the neuroligin-3 mouse model of autism	$281,742	Q2.S.E	University of Melbourne
Caspr2 as an autism candidate gene: A proteomic approach to function & structure	$312,000	Q2.Other	University of Medicine & Dentistry of New Jersey - Robert Wood Johnson Medical School
The microRNA pathway in translational regulation of neuronal development	$352,647	Q2.S.D	University of Massachusetts Medical School
Synaptic phenotype, development, and plasticity in the fragile X mouse	$401,852	Q2.S.D	University of Illinois at Urbana Champaign
Serotonin signal transduction in two groups of autistic patients	$0	Q2.Other	University of Illinois at Chicago
ACE Center: Cognitive affective and neurochemical processes underlying is in autism	$378,379	Q2.Other	University of Illinois at Chicago
Self-injurious behavior: An animal model of an autism endophenotype	$0	Q2.Other	University of Florida
Cerebellar plasticity and learning in a mouse model of autism	$31,250	Q2.Other	University of Chicago
Role of micro-RNAs in ASD affected circuit formation and function	$127,383	Q2.Other	University of California, San Francisco
A sex-specific dissection of autism genetics	$150,000	Q2.S.B	University of California, San Francisco
Role of negative regulators of FGF signaling in frontal cortex development and autism	$0	Q2.Other	University of California, San Francisco
Deciphering the function and regulation of AUTS2	$28,000	Q2.Other	University of California, San Francisco
Neuroligins and neurexins as autism candidate genes: Study of their association in synaptic connectivity	$0	Q2.Other	University of California, San Diego
Cellular characterization of Caspr2	$24,666	Q2.Other	University of California, San Diego

Project Title	Funding	Strategic Plan Objective	Institution
Kinetics of drug macromolecule complex formation	$712,920	Q2.Other	University of California, San Diego
Using fruit flies to map the network of autism-associated genes	$31,249	Q2.Other	University of California, San Diego
Elucidation of the developmental role of Jakmip1, an autism-susceptibility gene	$31,042	Q2.Other	University of California, Los Angeles
Imaging PTEN-induced changes in adult cortical structure and function in vivo	$300,339	Q2.Other	University of California, Los Angeles
Role of autism-susceptibility gene, CNTNAP2, in neural circuitry for vocal communication	$0	Q2.Other	University of California, Los Angeles
Functional analysis of neurexin IV in Drosophila	$68,652	Q2.Other	University of California, Los Angeles
The role of Fox-1 in neurodevelopment and autistic spectrum disorder	$145,757	Q2.Other	University of California, Los Angeles
A functional genomic analysis of the cerebral cortex	$85,471	Q2.Other	University of California, Los Angeles
BDNF and the restoration of synaptic plasticity in fragile X and autism	$490,756	Q2.S.D	University of California, Irvine
Limbic system function in carriers of the fragile X premutation	$677,700	Q2.S.D	University of California, Davis
The role of MeCP2 in Rett syndrome	$329,781	Q2.S.D	University of California, Davis
The role of MeCP2 in Rett syndrome (supplement)	$38,273	Q2.S.D	University of California, Davis
Mechanism of UBE3A imprint in neurodevelopment	$33,616	Q2.S.D	University of California, Davis
Inhibitory mechanisms for sensory map plasticity in cerebral cortex	$320,399	Q2.Other	University of California, Berkeley
Presynaptic regulation of quantal size by the cation/H+ exchangers NHE6 & NHE9	$29,650	Q2.Other	University of California, Berkeley
MeCP2 modulation of bdnf signaling: Shared mechanisms of Rett and autism	$314,059	Q2.S.D	University of Alabama at Birmingham
Defining cells and circuits affected in autism spectrum disorders	$669,298	Q2.Other	The Rockefeller University
Revealing protein synthesis defects in fragile X syndrome with new chemical tools	$315,341	Q2.S.D	Stanford University
Modulation of fxr1 splicing as a treatment strategy for autism in fragile X syndrome	$0	Q2.S.D	Stanford University
L-type calcium channel regulation of neuronal differentiation	$32,129	Q2.S.D	Stanford University
Regulation of activity-dependent ProSAp2 synaptic dynamics	$33,879	Q2.Other	Stanford University
Function of neurexins	$466,651	Q2.Other	Stanford University
Function and dysfunction of neuroligins in synaptic circuits	$450,000	Q2.Other	Stanford University

Project Title	Funding	Strategic Plan Objective	Institution
Probing a monogenic form of autism from molecules to behavior	$187,500	Q2.S.D	Stanford University
Augmentation of the cholinergic system in fragile X syndrome: a double-blind placebo study	$237,600	Q2.S.D	Stanford University
Neurobiology of RAI1, the causal gene for Smith-Magenis syndrome	$31,022	Q2.S.D	Stanford University
Mesocorticolimbic dopamine circuitry in mouse models of autism	$87,337	Q2.S.D	Stanford University
Frontostriatal synaptic dysfunction in a model of autism	$48,398	Q2.Other	Stanford University
Perturbed cortical patterning in autism	$0	Q2.Other	Seattle Children's Hospital
Cell adhesion molecules in CNS development	$535,691	Q2.Other	Scripps Research Institute
A stem cell based platform for identification of common defects in autism spectrum disorders	$28,000	Q2.S.D	Scripps Research Institute
Glial control of neuronal receptive ending morphology	$418,275	Q2.Other	Rockefeller University
MTHFR functional polymorphism C677T and genomic instability in the etiology of idiopathic autism in simplex families	$114,984	Q2.Other	Queen's University
Neuroligin, oxidative stress and autism	$75,000	Q2.Other	Oklahoma Medical Research Foundation
Cortical microcircuit dysfunction as a result of MET deficiency: A link to autism	$33,955	Q2.Other	Northwestern University
Excessive cap-dependent translation as a molecular mechanism underlying ASD	$0	Q2.Other	New York University
Early expression of autism spectrum disorder in experimental animals	$54,000	Q2.Other	Neurochlore
Engrailed genes and cerebellum morphology, spatial gene expression and circuitry	$470,003	Q2.Other	Memorial Sloan-Kettering Cancer Center
Brain lipid rafts in cholesterol biosynthesis disorders	$60,480	Q2.Other	Medical College of Wisconsin
Imaging synaptic neurexin-neuroligin complexes by proximity biotinylation: Applications to the molecular pathogenesis of autism	$0	Q2.Other	Massachusetts Institute of Technology
Regulation of synaptogenesis by cyclin-dependent kinase 5	$180,264	Q2.Other	Massachusetts Institute of Technology
Retrograde synaptic signaling by Neurexin and Neuroligin in C. elegans	$250,000	Q2.Other	Massachusetts General Hospital
MicroRNAs in synaptic plasticity and behaviors relevant to autism	$131,220	Q2.S.D	Massachusetts General Hospital
Identification of targets for the neuronal E3 ubiquitin ligase PAM	$60,000	Q2.S.D	Massachusetts General Hospital
Roles of miRNAs in regulation of Foxp2 and in autism	$0	Q2.Other	Louisiana State University
Autism phenotypes in Tuberous Sclerosis: Risk factors, features & architecture	$0	Q2.S.D	King's College London

Project Title	Funding	Strategic Plan Objective	Institution
Development of novel diagnostics for fragile X syndrome	$537,123	Q2.S.D	JS Genetics, Inc.
The role of CNTNAP2 in embryonic neural stem cell regulation	$75,000	Q2.Other	Johns Hopkins University School of Medicine
Olfactory abnormalities in the modeling of Rett syndrome	$351,575	Q2.S.D	Johns Hopkins University
High throughput screen for small molecule probes for neural network development	$405,000	Q2.Other	Johns Hopkins University
In vivo targeted gene silencing, a novel method	$218,472	Q2.Other	Indiana University-Purdue University Indianapolis
Perturbed activity-dependent plasticity mechanisms in autism	$158,034	Q2.Other	Harvard Medical School
Activity-dependent phosphorylation of MeCP2	$174,748	Q2.S.D	Harvard Medical School
Neuronal activity-dependent regulation of MeCP2	$426,857	Q2.S.D	Harvard Medical School
The role of UBE3A in autism	$62,500	Q2.S.D	Harvard Medical School
Proteome and interaction networks in autism	$31,250	Q2.Other	Harvard Medical School
Underlying mechanisms in a cerebellum-dependent model of autism	$0	Q2.S.D	Harvard Medical School
Elucidation and rescue of amygdala abnormalities in the Fmr1 mutant mouse model of fragile X syndrome	$150,000	Q2.S.D	George Washington University
Regulation of 22q11 genes in embroyonic and adult forebrain	$308,631	Q2.S.D	George Washington University
Quantitative proteomic approach towards understanding and treating autism	$112,500	Q2.S.D	Emory University
Young development of a novel pet ligand for detecting oxytocin receptors in brain	$261,360	Q2.Other	Emory University
PI3K/mTOR signaling as a novel biomarker and therapeutic target in autism	$100,000	Q2.Other	Emory University
Imaging signal transduction in single dendritic spines	$382,200	Q2.Other	Duke University
New approaches to local translation: SpaceSTAMP of proteins synthesized in axons	$246,254	Q2.S.D	Dana-Farber Cancer Institute
Aberrant synaptic form and function due to TSC-mTOR-related mutation in autism spectrum disorders	$300,000	Q2.S.D	Columbia University
Aberrant synaptic function caused by TSC mutation in autism	$0	Q2.S.D	Columbia University
Neurexin-neuroligin trans-synaptic interaction in learning and memory	$200,000	Q2.Other	Columbia University
Role of neurexin in the amygdala and associated fear memory	$25,000	Q2.Other	Columbia University
High-throughput DNA sequencing method for probing the connectivity of neural circuits at single-neuron resolution	$430,650	Q2.Other	Cold Spring Harbor Laboratory

Project Title	Funding	Strategic Plan Objective	Institution
Investigation of social brain circuits in mouse models of the 16p11.2 locus	$87,500	Q2.Other	Cold Spring Harbor Laboratory
The functional link between DISC1 and neuroligins: Two genetic factors in the etiology of autism	$0	Q2.S.D	Children's Memorial Hospital, Chicago
TrkB agonist therapy for sensorimotor dysfunction in Rett syndrome	$0	Q2.S.D	Case Western Reserve University
Autism and the insula: Genomic and neural circuits	$506,341	Q2.Other	California Institute of Technology
Functional role of IL-6 in fetal brain development and abnormal behavior	$41,800	Q2.Other	California Institute of Technology
Presynaptic fragile X proteins	$90,000	Q2.S.D	Brown University
Elucidating the function of class 4 semaphorins in GABAergic synapse formation	$337,818	Q2.Other	Brandeis University
Neuropeptide regulation of juvenile social behaviors	$14,755	Q2.Other	Boston College
A cerebellar mutant for investigating mechanisms of autism in Tuberous Sclerosis	$0	Q2.S.D	Boston Children's Hospital
In-vivo imaging of neuronal structure and function in a reversible mouse model for autism.	$28,000	Q2.S.D	Baylor College of Medicine
Investigating the homeostatic role of MeCP2 in mature brain	$35,400	Q2.S.D	Baylor College of Medicine
Pathophysiology of MeCP2 spectrum disorders	$170,383	Q2.S.D	Baylor College of Medicine
Dysregulation of mTOR signaling in fragile X syndrome	$403,767	Q2.S.D	Albert Einstein College of Medicine of Yeshiva University
Genetic rescue of fragile X syndrome in mice by targeted deletion of PIKE	$60,000	Q2.S.D	Albert Einstein College of Medicine of Yeshiva University